

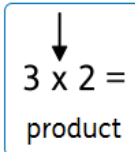
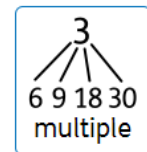
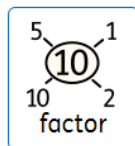
Year 5 Multiplication and Division Knowledge

multiplication

- lots of
- times
- multiply
- groups of
- product
- multiplied by
- multiple of
- repeated addition
- array

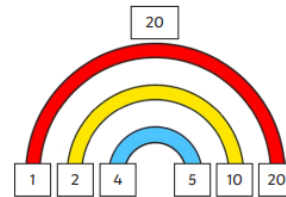
division

- divide
- divided by
- divided into
- share
- share equally
- equal groups of



Factors

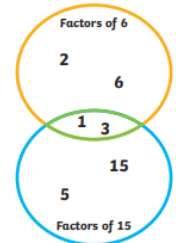
A factor is a number that divides into another number exactly, without leaving a remainder.



The factors of 20 are 1, 2, 4, 5, 10 and 20.

The factor pairs are:
1 and 20
2 and 10
4 and 5

A common factor is a factor of 2 or more numbers.



Short Multiplication

$$2543 \times 7 = 17801$$

	2	5	4	3
x				7
1	7	8	0	1

Remember to move any regrouped digits into the next column. After the next multiplication, add the regrouped number to the answer.

Long Multiplication

$$2543 \times 67 = 170381$$

	2	5	4	3
x			6	7
1	7	8	0	1
1	5	2	5	8
1	7	0	3	8

Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60).

Division

$$136 \div 4 = 34$$

		3	4
4	1	3	6
-	1	2	0
		1	6
	-	1	6
			0

→ 30 × 4

→ 4 × 4



Short Division

		3	8
4	1	5	2

15 ÷ 4 = 3 remainder 3

Remember to regroup any remainders and move them into the next column.

		4	5	5	r	3
5	2	2	7	8		

28 ÷ 5 = 5 remainder 3

If your calculation has a remainder, remember to record it in the answer using the letter r.

Squared and Cubed Numbers

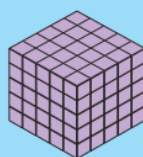


$$2^2 = 4$$

$$2 \times 2 = 4$$

$$2^3 = 8$$

$$2 \times 2 \times 2 = 8$$



$$5^2 = 25$$

$$5 \times 5 = 25$$

$$5^3 = 125$$

$$5 \times 5 \times 5 = 125$$

Prime Numbers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Related Calculations

$$8 \times 9 = 72$$

$$9 \times 8 = 72$$

$$80 \times 9 = 720$$

$$90 \times 8 = 720$$

$$72 \div 9 = 8$$

$$72 \div 8 = 9$$

$$720 \div 9 = 80$$

$$720 \div 8 = 90$$